

VII. (silent) Oracle Software 설치 + applyRU

1. Oracle software 설치를 위한 파일 압축 해제

oracle 유저에서 ORACLE_HOME에 Oracle software 파일 unzip

```
unzip /media/V982063-01.zip -d $ORACLE_HOME
```

```
[root@SON media]# su - oracle
[SONNY@oracle:~]$
[SONNY@oracle:~]$ unzip /media/V982063-01.zip -d $ORACLE_HOME
Archive: /media/V982063-01.zip
  creating: /u01/app/oracle/product/dbhome_1/drdaas/
  creating: /u01/app/oracle/product/dbhome_1/drdaas/admin/
  inflating: /u01/app/oracle/product/dbhome_1/drdaas/admin/drdsqtt_translator_setup.sql
  inflating: /u01/app/oracle/product/dbhome_1/drdaas/admin/drdaapkg_db2.sql
  inflating: /u01/app/oracle/product/dbhome_1/drdaas/admin/drdaas.ora
  inflating: /u01/app/oracle/product/dbhome_1/drdaas/admin/drdsqtt_set_profile_dd.sql
```

```
[SONNY@oracle:~]$ cd $ORACLE_HOME
[SONNY@oracle:dbhome_1]$ ls
OPatch  assistants  ctx  deinstall  env.ora  instantclient  jlib  network  oracore  owm  rdbms  runInstaller  sqlj  ucp
QOPatch bin  cv  demo  inventory  ldap  nls  ord  perl  relnotes  schagent.conf  sqlpatch  usm
R  clone  data  diagnostics  has  javavm  lib  odbc  ords  plsql  root.sh  sdk  sqlplus  utl
addnode  crs  dbjava  dmu  hs  jdbc  md  olap  oss  precomp  root.sh.old  slax  srvn  wwv
apex  css  dbs  drdaas  install  jdk  mgw  opmn  oui  racg  root.sh.old.1  sqldeveloper  suptools  xdk
```

2. OPatch 버전 확인 및 최신 버전으로 업데이트

- 전제 조건 : 19.23.0.0 으로 patch 하기 위해서는 OPatch 버전이 12.2.0.1.41 이상이어야 한다.

You must use the OPatch utility version **12.2.0.1.41 or later to apply this patch**

💡 아래 작업은 추후 grid 유저와 oracle 유저 각각에서 모두 수행

- 패치가 적용되는 모든 Oracle RAC 데이터베이스 홈과 Grid 홈에서 새 OPatch 유틸리티를 업데이트해야 합니다

1. OPatch 버전 확인

```
[SONNY@oracle:dbhome_1]$ opatch version
OPatch Version: 12.2.0.1.17

OPatch succeeded.
```

```
[SONNY@oracle:dbhome_1]$ opatch version
OPatch Version: 12.2.0.1.17

OPatch succeeded.
```

3. OPatch 최신 파일 업로드 후 백업 및 압축 파일 해제

Patch 6880880

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Description	OPatch 12.2.0.1.42 for DB 19.0.0.0.0 (Apr 2024)
Product	Oracle Global Lifecycle Management OPatch
Select a Release	OPatch 19.0.0.0.0
Platform or Language ⓘ	Linux x86
Last Updated	15-APR-2024
Size	125M (131308977 bytes)
Entitlement Class ⓘ	Software
Classification ⓘ	General

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Patchsets known to include or supersede Patch 6880880 ⓘ

No information available from the patch repository

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```
# OPatch 최신 파일 확인
ls /media

# 기존 OPatch 파일 백업
## mv OPatch OPatch_날짜
mv OPatch OPatch_240621

# -d 옵션을 사용하여 GRID_HOME에 OPatch 압축 파일 해제
unzip /media/p6880880_190000_Linux-x86-64 -d $ORACLE_HOME

# opatch 버전 확인
opatch version

OPatch Version: 12.2.0.1.42
OPatch succeeded.
```

```
[SONNY@oracle:dbhome_1]$ opatch version
OPatch Version: 12.2.0.1.42

OPatch succeeded.
```

```
[SONNY@oracle:dbhome_1]$ ls
OPatch      crs      diagnostics  inventory  network  oui      root.sh.old  sqlplus
OPatch_240621  css      dmdu         javavm     nls      owm      root.sh.old.1  srvrm
QOPatch     ctx      drdaas      jdbc       odbc     perl     runInstaller  suptools
R           cv       dv          jdk        olap     plsql    schagent.conf  ucp
addnode     data     env.ora     jlib       opmn     precomp  sdk           usm
apex        dbjava   has         ldap       oracore  racg     slax          utl
assistants  dbs      hs          lib        ord      rdbms    sqldeveloper  wwg
bin         deinstall  install    md         ords     relnotes  sqlj          xdk
clone       demo     instantclient  mgw       oss      root.sh    sqlpatch
```

3. Oracle SW 설치를 위한 Response file 작성

Oracle SW 및 DB 설치를 위한 Response file 사용

- 위치 : `$ORACLE_HOME/install/response`

```
[SONNY@oracle:~]$ cd $ORACLE_HOME/install/response
[SONNY@oracle:response]$ ls
db_install.rsp
[SONNY@oracle:response]$
[SONNY@oracle:response]$ cp db_install.rsp db_install1.rsp
[SONNY@oracle:response]$
[SONNY@oracle:response]$ ls
db_install.rsp  db_install1.rsp
[SONNY@oracle:response]$
[SONNY@oracle:response]$ vi db_install1.rsp
```

- response file 내용 요약

```
oracle.install.responseFileVersion=/oracle/install/rspfmt_dbinstall_response_schema_v1
9.0.0

# 설치 옵션 지정
oracle.install.option=INSTALL_DB_SWONLY

# Oracle SW를 설치할 때 사용할 UNIX그룹 이름 지정
UNIX_GROUP_NAME=dba

# Oracle Inventory 디렉토리 위치 지정
INVENTORY_LOCATION=/u01/app/oraInventory

# Oracle SW가 설치될 Oracle HOME 디렉토리 지정
ORACLE_HOME=/u01/app/oracle/product/dbhome_1

# Oracle Base 디렉토리 위치 지정
ORACLE_BASE=/u01/app/oracle
```

```
# 설치할 Oracle DB 에디션 지정
oracle.install.db.InstallEdition=EE

# group 이름 지정
oracle.install.db.OSDBA_GROUP=dba
oracle.install.db.OSOPER_GROUP=dba
oracle.install.db.OSBACKUPDBA_GROUP=dba
oracle.install.db.OSDGDBA_GROUP=dba
oracle.install.db.OSKMDBA_GROUP=dba
oracle.install.db.OSRACDBA_GROUP=dba

# root 스크립트 자동 실행 여부 지정
oracle.install.db.rootconfig.executeRootScript=false
```

```
[SONNY@oracle:~]$ cd $ORACLE_HOME/install/response
[SONNY@oracle:response]$ ls
db_install.rsp
[SONNY@oracle:response]$
[SONNY@oracle:response]$ cp db_install.rsp db_install1.rsp
[SONNY@oracle:response]$
[SONNY@oracle:response]$ ls
db_install.rsp db_install1.rsp
[SONNY@oracle:response]$
[SONNY@oracle:response]$ vi db_install1.rsp
```

4. 설치 전 사전 점검 수행

```
su - oracle
cd $ORACLE_HOME

./runInstaller -silent -responseFile $ORACLE_HOME/install/response/db_install1.rsp -executePrereqs
```

```
[SONNY@oracle:dbhome_1]$ ./runInstaller -silent -responseFile $ORACLE_HOME/install/response/db_install1.rsp -executePrereqs
Launching Oracle Database Setup Wizard...
Prerequisite checks executed successfully.
```

5. applyRU 를 사용하여 패치 및 Oracle SW 설치 진행

```
su - oracle
cd $ORACLE_HOME

./runInstaller -silent -responseFile -applyRU /media/unzipped_patch/36233126 $ORACLE_HOME/install/response/db_install1.rsp -ignorePrereqFailure
```

```
./runInstaller -silent -responseFile $ORACLE_HOME/install/response/db_install1.rsp -ignorePrereqFailure
```

- 패치 먼저 수행 됨

```
[SONNY@oracle:dbhome_1]$ ./runInstaller -silent -responseFile -applyRU /media/unzipped_patch/36233126 $ORACLE_HOME/install/response/db_install.rsp -ignorePrereqFailure
Preparing the home to patch...
Applying the patch /media/unzipped_patch/36233126...
Successfully applied the patch.
```

- 그 후 설치

Launching Oracle Database Setup Wizard...

[WARNING] [INS-13014] Target environment does not meet some optional requirements.

CAUSE: Some of the optional prerequisites are not met. See logs for details. /u01/app/oraInventory/logs/InstallActions2024-06-21_04-25-32PM/installActions2024-06-21_04-25-32PM.log

ACTION: Identify the list of failed prerequisite checks from the log: /u01/app/oraInventory/logs/InstallActions2024-06-21_04-25-32PM/installActions2024-06-21_04-25-32PM.log. Then either from the log file or from installation manual find the appropriate configuration to meet the prerequisites and fix it manually.

The response file for this session can be found at:

/u01/app/oracle/product/dbhome_1/install/response/db_2024-06-21_04-25-32PM.rsp

You can find the log of this install session at:

/u01/app/oraInventory/logs/InstallActions2024-06-21_04-25-32PM/installActions2024-06-21_04-25-32PM.log

As a root user, execute the following script(s):

1. /u01/app/oracle/product/dbhome_1/root.sh

Execute /u01/app/oracle/product/dbhome_1/root.sh on the following nodes:

[SON]

Successfully Setup Software with warning(s).

```
[SONNY@oracle:dbhome_1]$ ./runInstaller -silent -responseFile $ORACLE_HOME/install/response/db_install1.rsp -ignorePrereqFailure
Launching Oracle Database Setup Wizard...

[WARNING] [INS-13014] Target environment does not meet some optional requirements.
CAUSE: Some of the optional prerequisites are not met. See logs for details. /u01/app/oraInventory/logs/InstallActions2024-06-21_04-25-32PM/installActions2024-06-21_04-25-32PM.log
ACTION: Identify the list of failed prerequisite checks from the log: /u01/app/oraInventory/logs/InstallActions2024-06-21_04-25-32PM/installActions2024-06-21_04-25-32PM.log. Then either from the log file or from installation manual find the appropriate configuration to meet the prerequisites and fix it manually.
The response file for this session can be found at:
/u01/app/oracle/product/dbhome_1/install/response/db_2024-06-21_04-25-32PM.rsp

You can find the log of this install session at:
/u01/app/oraInventory/logs/InstallActions2024-06-21_04-25-32PM/installActions2024-06-21_04-25-32PM.log

As a root user, execute the following script(s):
1. /u01/app/oracle/product/dbhome_1/root.sh

Execute /u01/app/oracle/product/dbhome_1/root.sh on the following nodes:
[SON]

Successfully Setup Software with warning(s).
```

- 로그 확인 : IGNORABLE 이라서 무시하고 진행

```

TASK: [Inventory:ORACLE Integrity Check (ORACLE INTEGRITY)] TASK SUMMARY: SUCCESSFUL Total time taken [1 Seconds 681 Milliseconds]
INFO: [Jun 21, 2024 4:25:53 PM] ***** End of CPU Error logs *****
INFO: [Jun 21, 2024 4:25:53 PM] All forked task are completed at state performChecks
INFO: [Jun 21, 2024 4:25:53 PM] Completed background operations
INFO: [Jun 21, 2024 4:25:53 PM] Waiting for completion of background operations
INFO: [Jun 21, 2024 4:25:53 PM] Completed background operations
INFO: [Jun 21, 2024 4:25:53 PM] Moved to state <performChecks>
INFO: [Jun 21, 2024 4:25:53 PM] Waiting for completion of background operations
INFO: [Jun 21, 2024 4:25:53 PM] Completed background operations
INFO: [Jun 21, 2024 4:25:53 PM] Validating state <performChecks>
INFO: [Jun 21, 2024 4:25:53 PM] Using default Validator configured in the Action class oracle.install.iwv.db.action.PrereqAction
INFO: [Jun 21, 2024 4:25:53 PM] -----List of failed Tasks-----
INFO: [Jun 21, 2024 4:25:53 PM] *****
INFO: [Jun 21, 2024 4:25:53 PM] Package: policycoreutils-python-2.5-17: This is a prerequisite condition to test whether the package "policycoreutils-python-2.5-17" is available on the system.
INFO: [Jun 21, 2024 4:25:53 PM] Severity:IGNORABLE
INFO: [Jun 21, 2024 4:25:53 PM] OverallStatus:VERIFICATION_FAILED
INFO: [Jun 21, 2024 4:25:53 PM] -----End of failed Tasks List-----
WARNING: [Jun 21, 2024 4:25:53 PM] [WARNING] [INS-13014] Target environment does not meet some optional requirements.
CAUSE: Some of the optional prerequisites are not met. See logs for details. /u01/app/oraInventory/logs/InstallActions2024-06-21_04-25-32PM/installActions2024-06-21_04-25-32PM.log
ACTION: Identify the list of failed prerequisite checks from the log: /u01/app/oraInventory/logs/InstallActions2024-06-21_04-25-32PM/installActions2024-06-21_04-25-32PM.log. Then either from the log file or from installation manual find the appropriate configuration to meet the prerequisites and fix it manually.
INFO: [Jun 21, 2024 4:25:53 PM] Advice is CONTINUE
INFO: [Jun 21, 2024 4:25:53 PM] Completed validating state <performChecks>
INFO: [Jun 21, 2024 4:25:53 PM] Verifying route success
INFO: [Jun 21, 2024 4:25:53 PM] Executing initialize action at state showSummary
INFO: [Jun 21, 2024 4:25:53 PM] Completed executing initialize action at state <showSummary>
INFO: [Jun 21, 2024 4:25:53 PM] Waiting for completion of background operations
INFO: [Jun 21, 2024 4:25:53 PM] Completed background operations
INFO: [Jun 21, 2024 4:25:53 PM] Waiting for completion of background operations
INFO: [Jun 21, 2024 4:25:53 PM] Completed background operations
INFO: [Jun 21, 2024 4:25:53 PM] Executing action at state showSummary
INFO: [Jun 21, 2024 4:25:53 PM]

```

6. 스크립트 수행

```
[SONNY@oracle:dbhome_1]$ ./runInstaller -silent -responseFile $ORACLE_HOME/install/response/db_install1.rsp -ignorePrereqFailure
Launching Oracle Database Setup Wizard...
```

```
[WARNING] [INS-13014] Target environment does not meet some optional requirements.
CAUSE: Some of the optional prerequisites are not met. See logs for details. /u01/app/oraInventory/logs/InstallActions2024-06-21_04-25-32PM/installActions2024-06-21_04-25-32PM.log
```

ACTION: Identify the list of failed prerequisite checks from the log: /u01/app/oraInventory/logs/InstallActions2024-06-21_04-25-32PM/installActions2024-06-21_04-25-32PM.log. Then either from the log file or from installation manual find the appropriate configuration to meet the prerequisites and fix it manually.

The response file for this session can be found at:

```
/u01/app/oracle/product/dbhome_1/install/response/db_2024-06-21_04-25-32PM.rsp
```

You can find the log of this install session at:

```
/u01/app/oraInventory/logs/InstallActions2024-06-21_04-25-32PM/installActions2024-06-21_04-25-32PM.log
```

As a root user, execute the following script(s):

1. /u01/app/oracle/product/dbhome_1/root.sh

Execute /u01/app/oracle/product/dbhome_1/root.sh on the following nodes:

```
[SON]
```

Successfully Setup Software with warning(s).

- root에서 아래 수행

```
/u01/app/oracle/product/dbhome_1/root.sh
```

```

[root@SON ~]# /u01/app/oracle/product/dbhome_1/root.sh
Check /u01/app/oracle/product/dbhome_1/install/root_SON_2024-06-21_16-37-20-639403923.log for the output of root script
[root@SON ~]#
[root@SON ~]# vi /u01/app/oracle/product/dbhome_1/install/root_SON_2024-06-21_16-37-20-639403923.log
[root@SON ~]#
[root@SON ~]# cat /u01/app/oracle/product/dbhome_1/install/root_SON_2024-06-21_16-37-20-639403923.log
Performing root user operation.

The following environment variables are set as:
ORACLE_OWNER= oracle
ORACLE_HOME= /u01/app/oracle/product/dbhome_1
Copying dbhome to /usr/local/bin ...
Copying oraenv to /usr/local/bin ...
Copying coraenv to /usr/local/bin ...

Entries will be added to the /etc/oratab file as needed by
Database Configuration Assistant when a database is created
Finished running generic part of root script.
Now product-specific root actions will be performed.

```

7. 오라클 소프트웨어가 잘 설치되었는지 확인

1. sqlplus 접속 되는지 확인

```

[SONNY@oracle:~]$ sqlplus / as sysdba

SQL*Plus: Release 19.0.0.0.0 - Production on Fri Jun 21 16:38:43 2024
Version 19.23.0.0.0

Copyright (c) 1982, 2023, Oracle. All rights reserved.

Connected to an idle instance.

```

```

[SONNY@oracle:~]$ sqlplus / as sysdba

SQL*Plus: Release 19.0.0.0.0 - Production on Fri Jun 21 16:38:43 2024
Version 19.23.0.0.0

Copyright (c) 1982, 2023, Oracle. All rights reserved.

Connected to an idle instance.

```

8. 패치가 잘 수행 되었는지 확인

오라클 소프트웨어 버전 확인 버전 확인

```

su - oracle

opatch lspatches

```

```

[SONNY@oracle:~]$ opatch lspatches
36240578;OCW RELEASE UPDATE 19.23.0.0.0 (36240578)
36233263;Database Release Update : 19.23.0.0.240416 (36233263)

OPatch succeeded.

```

```
[SONNY@oracle:~]$ opatch lspatches
36240578;OCW RELEASE UPDATE 19.23.0.0.0 (36240578)
36233263;Database Release Update : 19.23.0.0.240416 (36233263)

OPatch succeeded.
```